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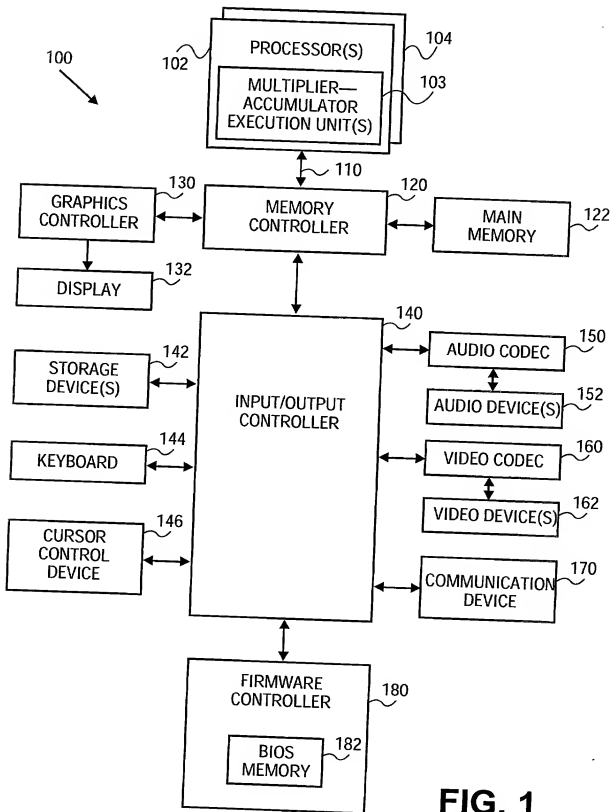


FIG. 1

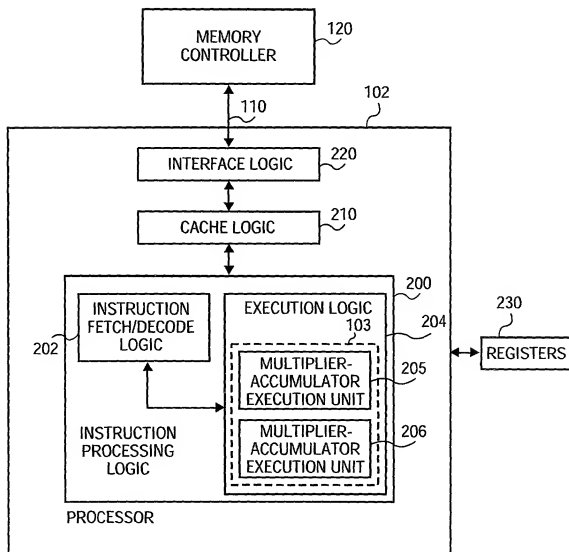


FIG. 2

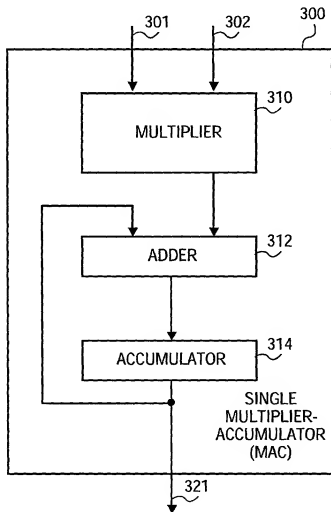


FIG. 3

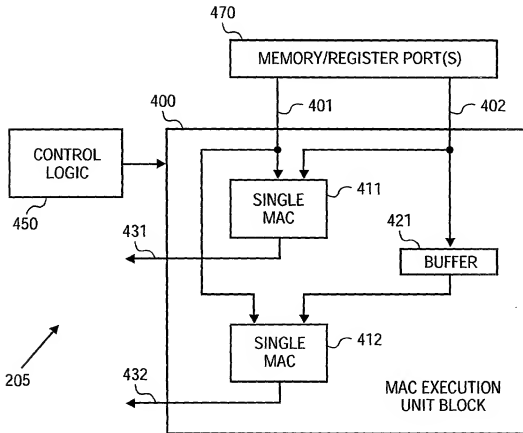


FIG. 4

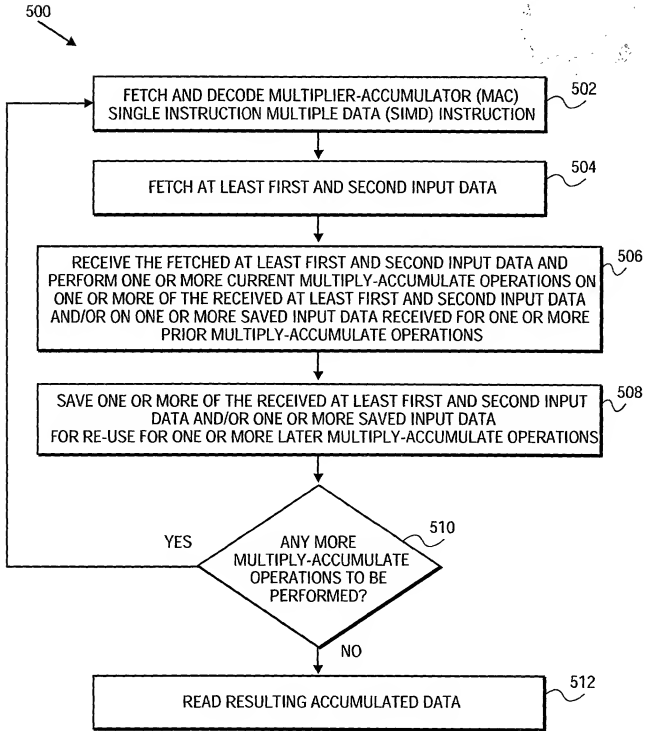


FIG. 5

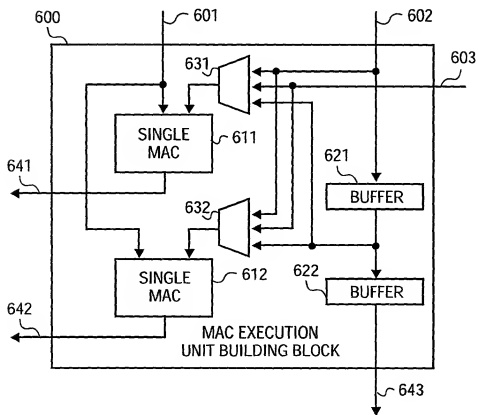


FIG. 6

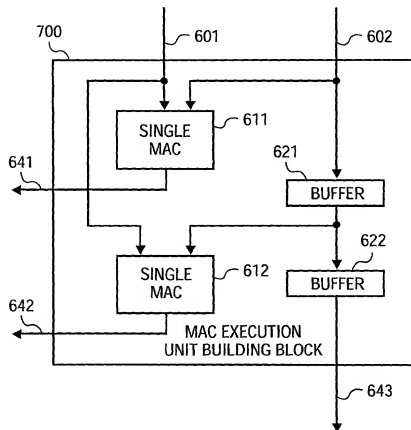


FIG. 7

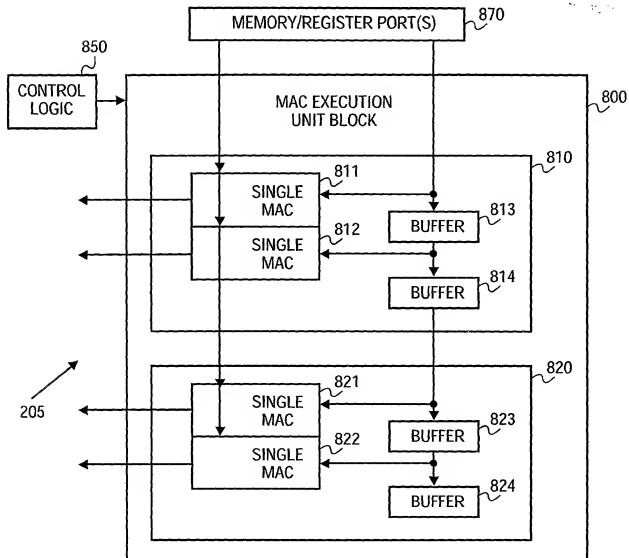


FIG. 8

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900 

MAC	Computation Cycle N		Computation Cycle N+1		Computation Cycle N+2	
	1st MAC Input	2nd MAC Input	1st MAC Input	2nd MAC Input	1st MAC Input	2nd MAC Input
811: y(3)	c(31)	x(-28)	c(30)	x(-27)	c(29)	x(-26)
812: y(2)	c(31)	x(-29)	c(30)	x(-28)	c(29)	x(-27)
821: y(1)	c(31)	x(-30)	c(30)	x(-29)	c(29)	x(-28)
822: y(0)	c(31)	x(-31)	c(30)	x(-30)	c(29)	x(-29)

FIG. 9

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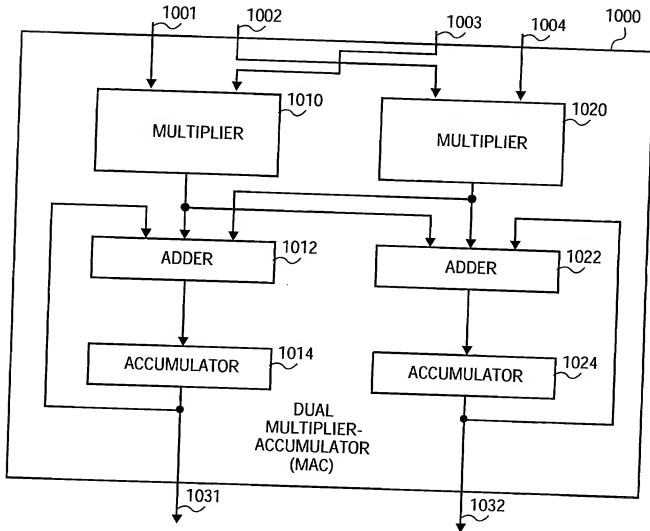


FIG. 10

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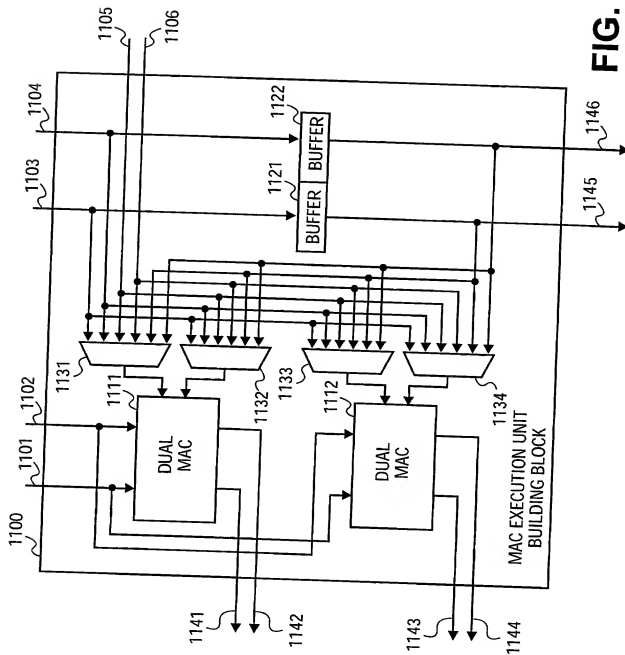


FIG. 11

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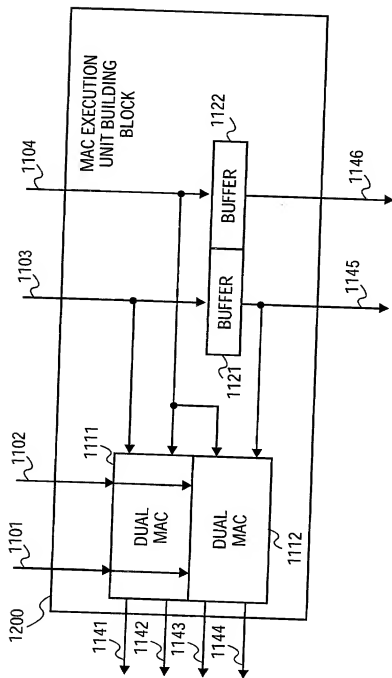


FIG. 12

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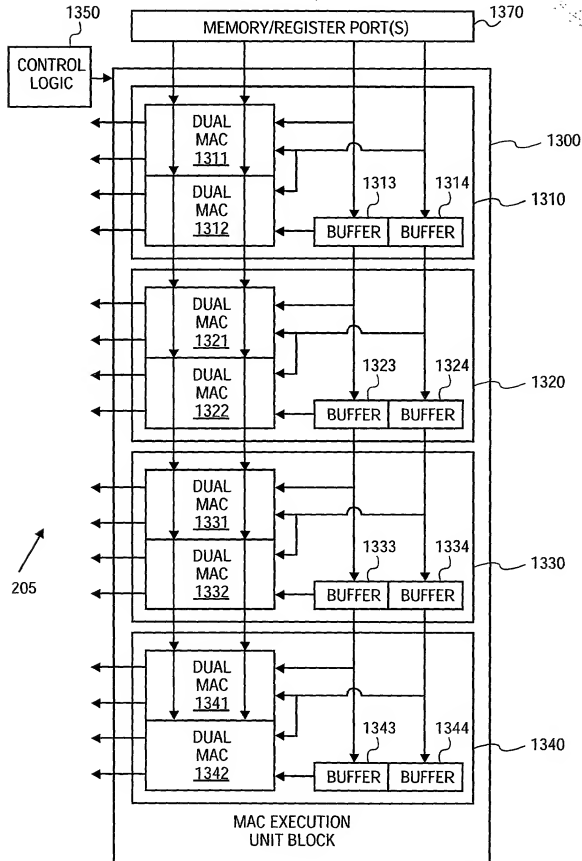


FIG. 13

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1400

MAC	Computation Cycle N				Computation Cycle N+1				Computation Cycle N+2			
	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1311: y(7)	c(30)	x(-23)	c(31)	x(-24)	c(28)	x(-21)	c(29)	x(-22)	c(26)	x(-19)	c(27)	x(-20)
1312: y(6)	c(30)	x(-24)	c(31)	x(-25)	c(28)	x(-22)	c(29)	x(-23)	c(26)	x(-20)	c(27)	x(-21)
1321: y(5)	c(30)	x(-25)	c(31)	x(-26)	c(28)	x(-23)	c(29)	x(-24)	c(26)	x(-21)	c(27)	x(-22)
1322: y(4)	c(30)	x(-26)	c(31)	x(-27)	c(28)	x(-24)	c(29)	x(-25)	c(26)	x(-22)	c(27)	x(-23)
1331: y(3)	c(30)	x(-27)	c(31)	x(-28)	c(28)	x(-25)	c(29)	x(-26)	c(26)	x(-23)	c(27)	x(-24)
1332: y(2)	c(30)	x(-28)	c(31)	x(-29)	c(28)	x(-26)	c(29)	x(-27)	c(26)	x(-24)	c(27)	x(-25)
1341: y(1)	c(30)	x(-29)	c(31)	x(-30)	c(28)	x(-27)	c(29)	x(-28)	c(26)	x(-25)	c(27)	x(-26)
1342: y(0)	c(30)	x(-30)	c(31)	x(-31)	c(28)	x(-28)	c(29)	x(-29)	c(26)	x(-26)	c(27)	x(-27)

FIG. 14

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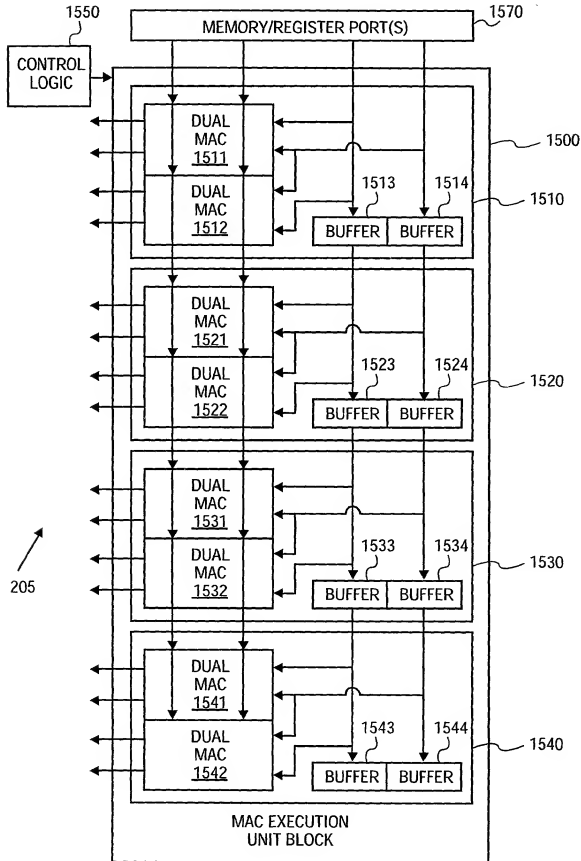


FIG. 15

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1600



MAC	Computation Cycle N				Computation Cycle N+1				Computation Cycle N+2			
	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1511: y(3)r	c(31)r	x(-28)r	c(31)i	x(-28)i	c(30)r	x(-27)r	c(30)i	x(-27)i	c(29)r	x(-26)r	c(29)i	x(-26)i
1512: y(3)i	c(31)r	x(-28)r	c(31)i	x(-28)i	c(30)r	x(-27)r	c(30)i	x(-27)i	c(29)r	x(-26)r	c(29)i	x(-26)i
1521: y(2)r	c(31)r	x(-29)r	c(31)i	x(-29)i	c(30)r	x(-28)r	c(30)i	x(-28)i	c(29)r	x(-27)r	c(29)i	x(-27)i
1522: y(2)i	c(31)r	x(-29)r	c(31)i	x(-29)i	c(30)r	x(-28)r	c(30)i	x(-28)i	c(29)r	x(-27)r	c(29)i	x(-27)i
1531: y(1)r	c(31)r	x(-30)r	c(31)i	x(-30)i	c(30)r	x(-29)r	c(30)i	x(-29)i	c(29)r	x(-28)r	c(29)i	x(-28)i
1532: y(1)i	c(31)r	x(-30)r	c(31)i	x(-30)i	c(30)r	x(-29)r	c(30)i	x(-29)i	c(29)r	x(-28)r	c(29)i	x(-28)i
1541: y(0)r	c(31)r	x(-31)r	c(31)i	x(-31)i	c(30)r	x(-30)r	c(30)i	x(-30)i	c(29)r	x(-29)r	c(29)i	x(-29)i
1542: y(0)i	c(31)r	x(-31)r	c(31)i	x(-31)i	c(30)r	x(-30)r	c(30)i	x(-30)i	c(29)r	x(-29)r	c(29)i	x(-29)i

FIG. 16

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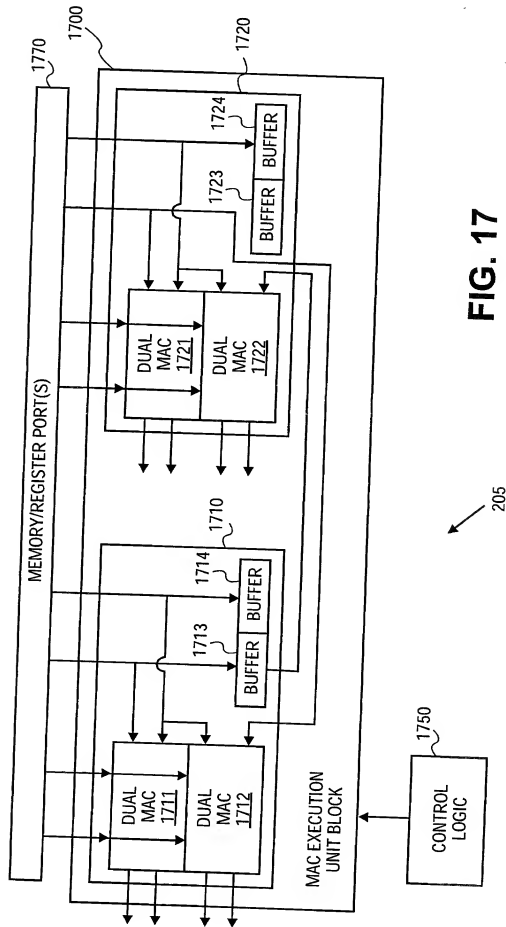


FIG. 17

1800



Computation Cycle N									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1711: y(1)	c(28)	x(-27)	c(29)	x(-28)	1721: y(1)	c(30)	x(-29)	c(31)	x(-30)
1712: y(0)	c(28)	x(-28)	c(29)	x(-29)	1722: y(0)	c(30)	x(-30)	c(31)	x(-31)
Computation Cycle N+1									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1711: y(1)	c(24)	x(-23)	c(25)	x(-24)	1721: y(1)	c(26)	x(-25)	c(27)	x(-26)
1712: y(0)	c(24)	x(-24)	c(25)	x(-25)	1722: y(0)	c(26)	x(-26)	c(27)	x(-27)
Computation Cycle N+2									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1711: y(1)	c(20)	x(-19)	c(21)	x(-20)	1721: y(1)	c(22)	x(-21)	c(23)	x(-22)
1712: y(0)	c(20)	x(-20)	c(21)	x(-21)	1722: y(0)	c(22)	x(-22)	c(23)	x(-23)

FIG. 18

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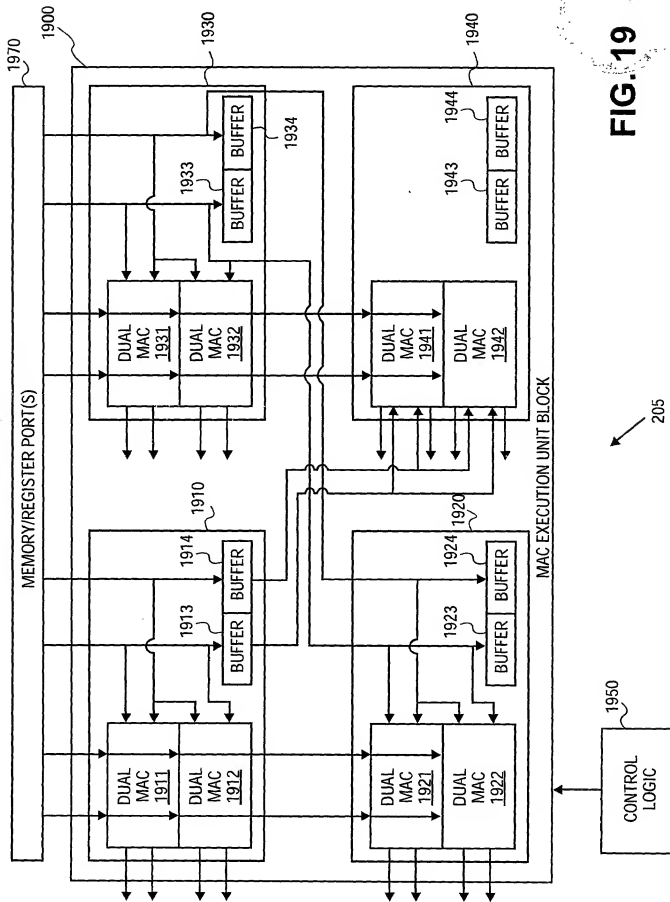
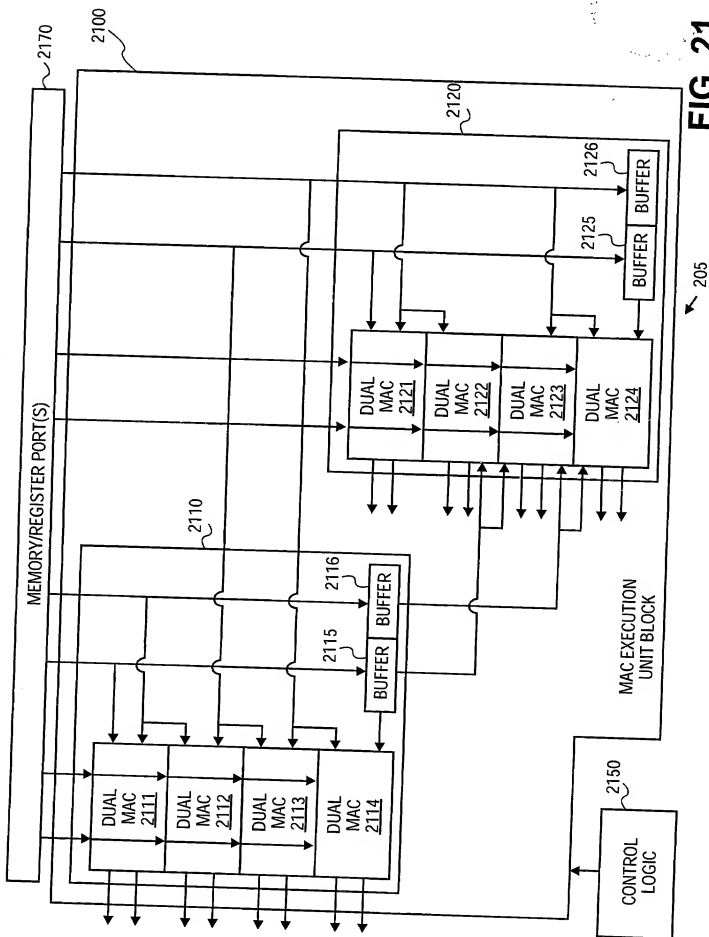


FIG. 19

Computation Cycle N									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1911: y(1)r	c(30)r	x(-29)r	c(30)i	x(-29)i	1931: y(1)r	c(31)r	x(-30)r	c(31)i	x(-30)i
1912: y(1)i	c(30)r	x(-29)i	c(30)i	x(-29)i	1932: y(1)i	c(31)r	x(-30)i	c(31)i	x(-30)r
1921: y(0)r	c(30)r	x(-30)r	c(30)i	x(-30)i	1941: y(0)r	c(31)r	x(-31)r	c(31)i	x(-31)i
1922: y(0)i	c(30)r	x(-30)i	c(30)i	x(-30)r	1942: y(0)i	c(31)r	x(-31)i	c(31)i	x(-31)r
Computation Cycle N+1									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1911: y(1)r	c(28)r	x(-27)r	c(28)i	x(-27)i	1931: y(1)r	c(29)r	x(-28)r	c(29)i	x(-28)i
1912: y(1)i	c(28)r	x(-27)i	c(28)i	x(-27)r	1932: y(1)i	c(29)r	x(-28)i	c(29)i	x(-28)r
1921: y(0)r	c(28)r	x(-28)r	c(28)i	x(-28)i	1941: y(0)r	c(29)r	x(-29)r	c(29)i	x(-29)i
1922: y(0)i	c(28)r	x(-28)i	c(28)i	x(-28)r	1942: y(0)i	c(29)r	x(-29)i	c(29)i	x(-29)r
Computation Cycle N+2									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
1911: y(1)r	c(26)r	x(-25)r	c(26)i	x(-25)i	1931: y(1)r	c(27)r	x(-26)r	c(27)i	x(-26)i
1912: y(1)i	c(26)r	x(-25)i	c(26)i	x(-25)r	1932: y(1)i	c(27)r	x(-26)i	c(27)i	x(-26)r
1921: y(0)r	c(26)r	x(-26)r	c(26)i	x(-26)i	1941: y(0)r	c(27)r	x(-27)r	c(27)i	x(-27)i
1922: y(0)i	c(26)r	x(-26)i	c(26)i	x(-26)r	1942: y(0)i	c(27)r	x(-27)i	c(27)i	x(-27)r

FIG. 21



2200

Computation Cycle N									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2111: y(3)	c(28)	x(-25)	c(29)	x(-26)	2121: y(3)	c(30)	x(-27)	c(31)	x(-28)
2112: y(2)	c(28)	x(-26)	c(29)	x(-27)	2122: y(2)	c(30)	x(-28)	c(31)	x(-29)
2113: y(1)	c(28)	x(-27)	c(29)	x(-28)	2123: y(1)	c(30)	x(-29)	c(31)	x(-30)
2114: y(0)	c(28)	x(-28)	c(29)	x(-29)	2124: y(0)	c(30)	x(-30)	c(31)	x(-31)
Computation Cycle N+1									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2111: y(3)	c(24)	x(-21)	c(25)	x(-22)	2121: y(3)	c(26)	x(-23)	c(27)	x(-24)
2112: y(2)	c(24)	x(-22)	c(25)	x(-23)	2122: y(2)	c(26)	x(-24)	c(27)	x(-25)
2113: y(1)	c(24)	x(-23)	c(25)	x(-24)	2123: y(1)	c(26)	x(-25)	c(27)	x(-26)
2114: y(0)	c(24)	x(-24)	c(25)	x(-25)	2124: y(0)	c(26)	x(-26)	c(27)	x(-27)
Computation Cycle N+2									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2111: y(3)	c(20)	x(-17)	c(21)	x(-18)	2121: y(3)	c(22)	x(-19)	c(23)	x(-20)
2112: y(2)	c(20)	x(-18)	c(21)	x(-19)	2122: y(2)	c(22)	x(-20)	c(23)	x(-21)
2113: y(1)	c(20)	x(-19)	c(21)	x(-20)	2123: y(1)	c(22)	x(-21)	c(23)	x(-22)
2114: y(0)	c(20)	x(-20)	c(21)	x(-21)	2124: y(0)	c(22)	x(-22)	c(23)	x(-23)

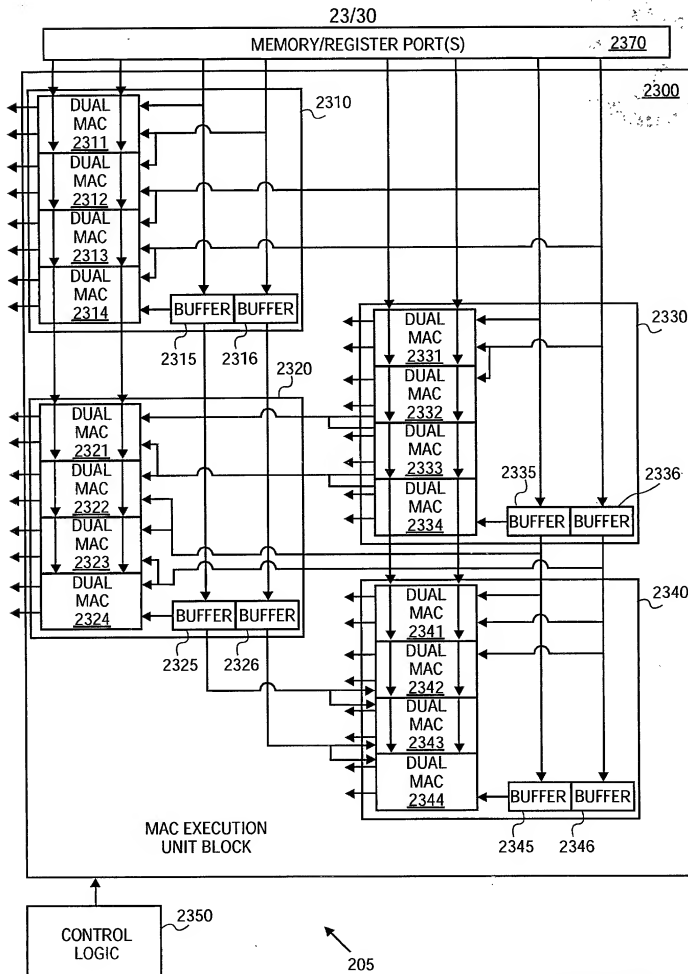


FIG. 23

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FIG. 24A

Computation Cycle N									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2311: y(7)	c(28)	x(-21)	c(29)	x(-22)	2331: y(7)	c(30)	x(-23)	c(31)	x(-24)
2312: y(6)	c(28)	x(-22)	c(29)	x(-23)	2332: y(6)	c(30)	x(-24)	c(31)	x(-25)
2313: y(5)	c(28)	x(-23)	c(29)	x(-24)	2333: y(5)	c(30)	x(-25)	c(31)	x(-26)
2314: y(4)	c(28)	x(-24)	c(29)	x(-25)	2334: y(4)	c(30)	x(-26)	c(31)	x(-27)
2321: y(3)	c(28)	x(-25)	c(29)	x(-26)	2341: y(3)	c(30)	x(-27)	c(31)	x(-28)
2322: y(2)	c(28)	x(-26)	c(29)	x(-27)	2342: y(2)	c(30)	x(-28)	c(31)	x(-29)
2323: y(1)	c(28)	x(-27)	c(29)	x(-28)	2343: y(1)	c(30)	x(-29)	c(31)	x(-30)
2324: y(0)	c(28)	x(-28)	c(29)	x(-29)	2344: y(0)	c(30)	x(-30)	c(31)	x(-31)
Computation Cycle N+1									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2311: y(7)	c(24)	x(-17)	c(25)	x(-18)	2331: y(7)	c(26)	x(-19)	c(27)	x(-20)
2312: y(6)	c(24)	x(-18)	c(25)	x(-19)	2332: y(6)	c(26)	x(-20)	c(27)	x(-21)
2313: y(5)	c(24)	x(-19)	c(25)	x(-20)	2333: y(5)	c(26)	x(-21)	c(27)	x(-22)
2314: y(4)	c(24)	x(-20)	c(25)	x(-21)	2334: y(4)	c(26)	x(-22)	c(27)	x(-23)
2321: y(3)	c(24)	x(-21)	c(25)	x(-22)	2341: y(3)	c(26)	x(-23)	c(27)	x(-24)
2322: y(2)	c(24)	x(-22)	c(25)	x(-23)	2342: y(2)	c(26)	x(-24)	c(27)	x(-25)
2323: y(1)	c(24)	x(-23)	c(25)	x(-24)	2343: y(1)	c(26)	x(-25)	c(27)	x(-26)
2324: y(0)	c(24)	x(-24)	c(25)	x(-25)	2344: y(0)	c(26)	x(-26)	c(27)	x(-27)

Computation Cycle N+2									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2311: y(7)	c(20)	x(-13)	c(21)	x(-14)	2331: y(7)	c(22)	x(-15)	c(23)	x(-16)
2312: y(6)	c(20)	x(-14)	c(21)	x(-15)	2332: y(6)	c(22)	x(-16)	c(23)	x(-17)
2313: y(5)	c(20)	x(-15)	c(21)	x(-16)	2333: y(5)	c(22)	x(-17)	c(23)	x(-18)
2314: y(4)	c(20)	x(-16)	c(21)	x(-17)	2334: y(4)	c(22)	x(-18)	c(23)	x(-19)
2321: y(3)	c(20)	x(-17)	c(21)	x(-18)	2341: y(3)	c(22)	x(-19)	c(23)	x(-20)
2322: y(2)	c(20)	x(-18)	c(21)	x(-19)	2342: y(2)	c(22)	x(-20)	c(23)	x(-21)
2323: y(1)	c(20)	x(-19)	c(21)	x(-20)	2343: y(1)	c(22)	x(-21)	c(23)	x(-22)
2324: y(0)	c(20)	x(-20)	c(21)	x(-21)	2344: y(0)	c(22)	x(-22)	c(23)	x(-23)

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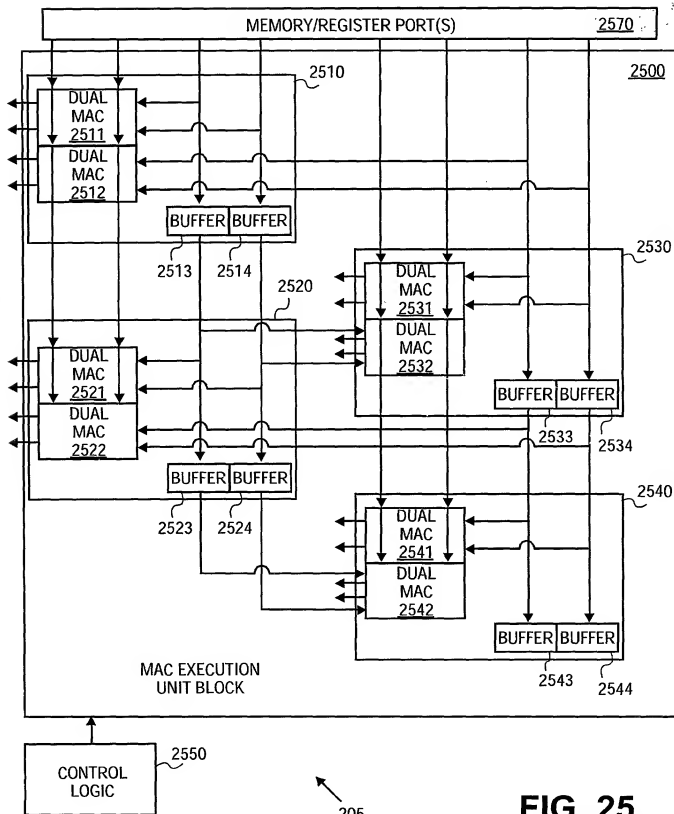


FIG. 25

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2600

Computation Cycle N									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2511: y(6)	c(28)	x(-22)	c(29)	x(-23)	2531: y(6)	c(30)	x(-24)	c(31)	x(-25)
2512: y(4)	c(28)	x(-24)	c(29)	x(-25)	2532: y(4)	c(30)	x(-26)	c(31)	x(-27)
2521: y(2)	c(28)	x(-26)	c(29)	x(-27)	2541: y(2)	c(30)	x(-28)	c(31)	x(-29)
2522: y(0)	c(28)	x(-28)	c(29)	x(-29)	2542: y(0)	c(30)	x(-30)	c(31)	x(-31)
Computation Cycle N+1									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2511: y(6)	c(24)	x(-18)	c(25)	x(-19)	2531: y(6)	c(26)	x(-20)	c(27)	x(-21)
2512: y(4)	c(24)	x(-20)	c(25)	x(-21)	2532: y(4)	c(26)	x(-22)	c(27)	x(-23)
2521: y(2)	c(24)	x(-22)	c(25)	x(-23)	2541: y(2)	c(26)	x(-24)	c(27)	x(-25)
2522: y(0)	c(24)	x(-24)	c(25)	x(-25)	2542: y(0)	c(26)	x(-26)	c(27)	x(-27)
Computation Cycle N+2									
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input
2511: y(6)	c(20)	x(-14)	c(21)	x(-15)	2531: y(6)	c(22)	x(-16)	c(23)	x(-17)
2512: y(4)	c(20)	x(-16)	c(21)	x(-17)	2532: y(4)	c(22)	x(-18)	c(23)	x(-19)
2521: y(2)	c(20)	x(-18)	c(21)	x(-19)	2541: y(2)	c(22)	x(-20)	c(23)	x(-21)
2522: y(0)	c(20)	x(-20)	c(21)	x(-21)	2542: y(0)	c(22)	x(-22)	c(23)	x(-23)

FIG. 26

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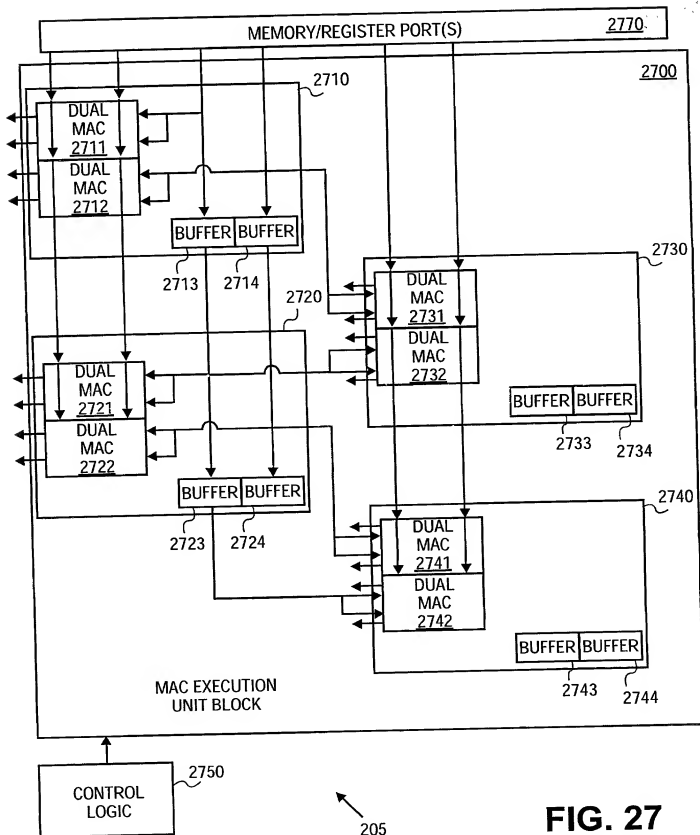


FIG. 27

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Computation Cycle N											
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input		
2711	y(7)			x(-19)	2731	y(7)					
	y(6)	c(28)	x(-19)			y(6)					
2712	y(5)			x(-20)	2732	y(5)					
	y(4)	c(28)	x(-20)			y(4)	x(-21)				
2721	y(3)			x(-21)	2741	y(3)					
	y(2)	c(28)	x(-21)			y(2)	x(-22)				
2722	y(1)			x(-22)	2742	y(1)					
	y(0)	c(28)	x(-22)			y(0)	c(30)	x(-23)			
Computation Cycle N+1											
MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC	1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input		
2711	y(7)			x(-17)	2731	y(7)					
	y(6)	c(24)	x(-17)			y(6)	c(26)	x(-18)			
2712	y(5)			x(-18)	2732	y(5)					
	y(4)	c(24)	x(-18)			y(4)	c(26)	x(-19)			
2721	y(3)			x(-19)	2741	y(3)					
	y(2)	c(24)	x(-19)			y(2)	c(26)	x(-20)			
2722	y(1)			x(-20)	2742	y(1)					
	y(0)	c(24)	x(-20)			y(0)	c(26)	x(-21)			

FIG. 28A

Computation Cycle N+2												
MAC		1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	MAC		1st MAC Input	3rd MAC Input	2nd MAC Input	4th MAC Input	
2711	y(7)			c(21)	x(-15)	2731	y(7)			c(23)	x(-16)	
	y(6)	c(20)	x(-15)				y(6)	c(22)	x(-16)			
2712	y(5)			c(21)	x(-16)	2732	y(5)			c(23)	x(-17)	
	y(4)	c(20)	x(-16)				y(4)	c(22)	x(-17)			
2721	y(3)			c(21)	x(-17)	2741	y(3)			c(23)	x(-18)	
	y(2)	c(20)	x(-17)				y(2)	c(22)	x(-18)			
2722	y(1)			c(21)	x(-18)	2742	y(1)			c(23)	x(-19)	
	y(0)	c(20)	x(-18)				y(0)	c(22)	x(-19)			